



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,557

08/18/2006

Marco Ruzzier

05788.0342.00000

8847

22852

7590

11/18/2009

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

BELYAEV, YANA

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

11/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,557	Applicant(s) RUZZIER ET AL.	
	Examiner YANA BELYAEV	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) 22-35 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-40 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/27/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1791

DETAILED ACTION

Election/Restrictions

1. Claims 22-35 and 41 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 18 September 2009.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 36, 39, 40, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-163631 (Naka hereinafter) in view of EP 0769687 (Unterberger hereinafter).

Machine Translations (attached) used for both Naka and Unterberger. All citations refer to the attached machine translations.

Regarding claims 36 and 42, Naka discloses a method for measuring the weight of a perform for optical fibers during a chemical deposition process for the formation of a perform (abstract), comprising the steps of:

constraining an elongated element comprising a chemical deposition substrate to a chemical deposition machine for the formation of the perform (paragraph 13 and Figure 1, elements 7 and 12);

Art Unit: 1791

detecting the frequency of oscillation of the elongated element (paragraph 21 and Figure 2A, elements 10A-10D);

calculating the weight of the perform according to the detected frequency of calculation (paragraph 21, “the weight of the optical fiber perform...”).

Naka does not disclose inducing an oscillation of the elongated element.

However, Unterberger, who discloses determining mass per unit length from fibers in a similar means as that disclosed by Naka, discloses vibrating the fiber in order to determine the mass per unit length (page 1, last paragraph, “The object of the invention”) via the “oscillation method” (page 1, paragraph 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have vibrated the fiber in order to determine the mass, since as the formula explains, weight is determined by frequency of vibration (Unterberger, page 1, paragraph 2). Thus, by vibrating the fiber and measuring the frequency of oscillation, the formula can be solved for the weight of the optical fiber.

Regarding claims 39 and 40, Naka discloses detecting the frequency of oscillation by generating a signal representing the position in time of the elongated element and processing the signal to work out the frequency of oscillation of the elongated element (paragraph 41), wherein the examiner interprets that determining the position gap is equivalent to determining the frequency since the position gap is used to determine the frequency (paragraph 21).

Naka does not disclose generating a signal representing the position in time by sending a luminous signal.

Art Unit: 1791

However, Unterberger discloses sending a luminous signal toward a target rigidly associated with the elongated element, collecting a luminous signal scattered by the target and processing the collected luminous signal to generate an electric signal representing the distance of the target (page 3, paragraphs 7-8 through page 4, paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have generated a signal representing the position in time by sending a luminous signal. The rationale to do so would have been to automated the method so that errors are minimized and make the method relative inexpensive (page 4, paragraph 2).

3. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naka in view of Unterberger and further in view of US Patent 4,453,170 (Arao hereinafter).

The teachings of Naka in view of Unterberger are detailed in the rejection of claims 36, 39, 40, and 42 under 35 USC 103(a) above.

Machine Translations (attached) used for both Naka and Unterberger. All citations refer to the attached machine translations.

Regarding claim 38, Unterberger does not disclose the step of inducing an oscillation of the elongated element.

However, Naka discloses supplying current for a predetermined time and interrupting the supply of current after said predetermined time (page 2, paragraph 2, “time interval”).

The obviousness for combining Naka with Unterberger is stated in the rejection of claim 1.

Art Unit: 1791

However, neither Naka nor Unterberger disclose supplying the current into a solenoid arranged on the out of and coaxially to a coupling element rigidly associated with the elongated element, such that the coupling element comprises at least one permanent magnet.

Arao, however, discloses supplying the current into a solenoid arranged on the out of and coaxially to a coupling element rigidly associated with the elongated element, such that the coupling element comprises at least one permanent magnet (Arao, column, lines).

It would have been obvious to one of ordinary skill in the art to have used the solenoid arrangement disclosed by Arao in the invention disclosed by Naka in view of Unterberger. The rationale to do so would have been the motivation to use a well known vibration forming device (abstract) which is effective at controlling mechanical vibrations (column 3, lines 24-26).

4. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naka in view of Unterberger and further in view of US Patent 4,293,231 (Lyle hereinafter).

The teachings of Naka in view of Unterberger are detailed in the rejection of claims 36, 39, 40, and 42 under 35 USC 103(a) above.

Machine Translations (attached) used for both Naka and Unterberger. All citations refer to the attached machine translations.

Regarding claim 37, Unterberger does not disclose the step of inducing an oscillation of the elongated element.

However, Naka discloses supplying current for a predetermined time and interrupting the supply of current after said predetermined time (page 2, paragraph 2, “time interval”).

Art Unit: 1791

The obviousness for combining Naka with Unterberger is stated in the rejection of claim 1.

However, neither Naka nor Unterberger disclose supplying pressurized air and then discharging the air.

Lyle, however, discloses supplying pressurized air (column 3, lines 45-52) and then discharging the air (column 3, lines 57-59).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used pressurized air to induce oscillation, since it was a well known method at the time of the invention for easily and economically inducing oscillation (Lyle, column 3, lines 2-4).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YANA BELYAEV whose telephone number is (571)270-7662. The examiner can normally be reached on M-Th 8:30am - 6pm; F 8:30 am- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. B./
Examiner, Art Unit 1791

/STEVEN P. GRIFFIN/
Supervisory Patent Examiner, Art Unit
1791